

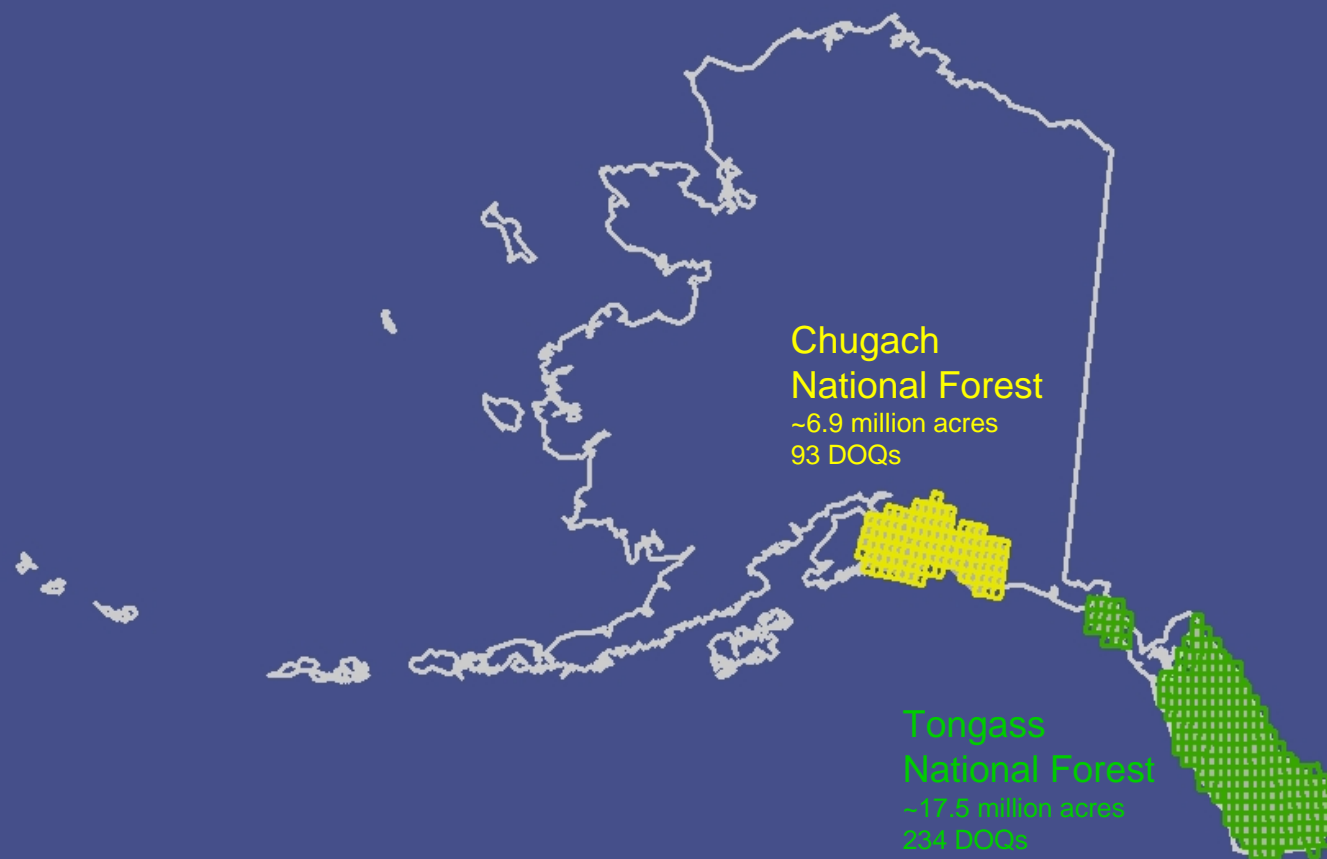


Digital Orthophoto Quadrangles (DOQs) **Existing and Next Generation**

USDA Forest Service
Tongass and Chugach National Forests
Alaska

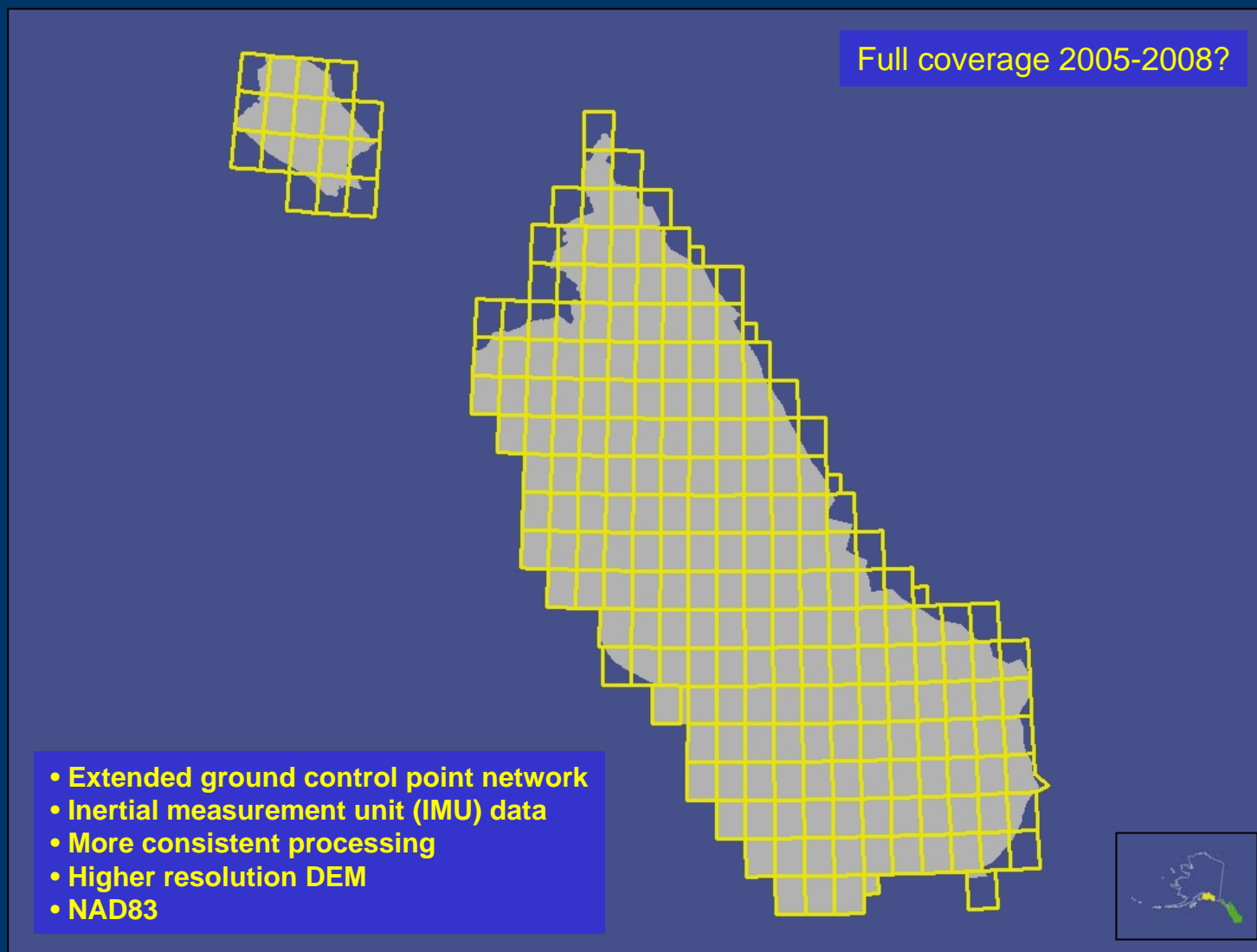


USDA Forest Service Area of Interest: **Priority One**





- Full coverage 1996-1998
- NAPP-like 1:40,000 scale
- 0% cloud cover
- Aerial photography, calibrated sensor
- 2 m resolution
- Panchromatic
- USGS 60 meter DEMs for orthorectification
- Sparse control
- Cost?
- No licensing restrictions

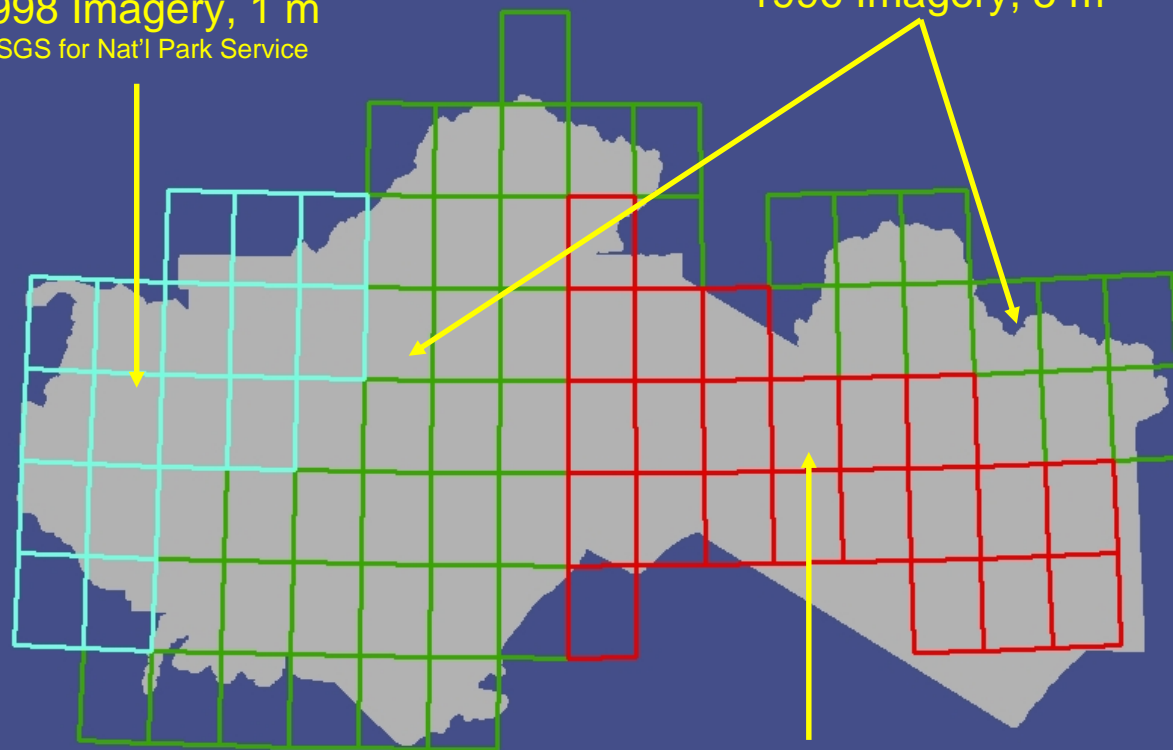


- NAPP-like 1:40,000 scale aerial photography, calibrated sensor
- 5% cloud cover
- 1 m resolution
- Natural color
- 20 m DEMs generated photogrammetrically for orthorectification
- Extended ground control
- No licensing restrictions
- \$500,000 + GSTC processing and control will include AT DEM and orthorectification (Total 7.5 quad = \$1939)



1998 Imagery, 1 m
USGS for Nat'l Park Service

1996 Imagery, 5 m



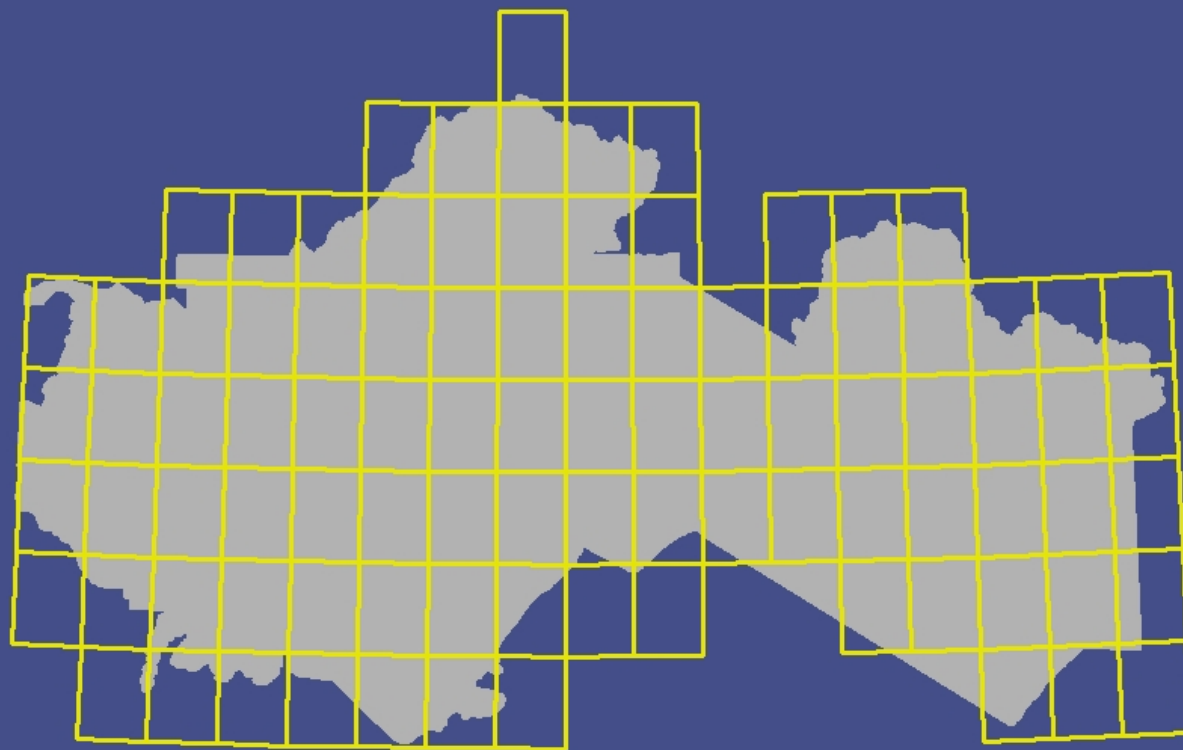
1996 Imagery, 2 m

- Weak ground control point network
- Inconsistent processing
- NAD27



- Film-based calibrated sensor for stereo collection
- 0% cloud cover
- Scanned/digitized aerial photos
- DEMs derived from existing topoquads
- Cost unknown
- No licensing restrictions

Linear coverage



- Extended ground control point network
- More consistent processing
- NAD83



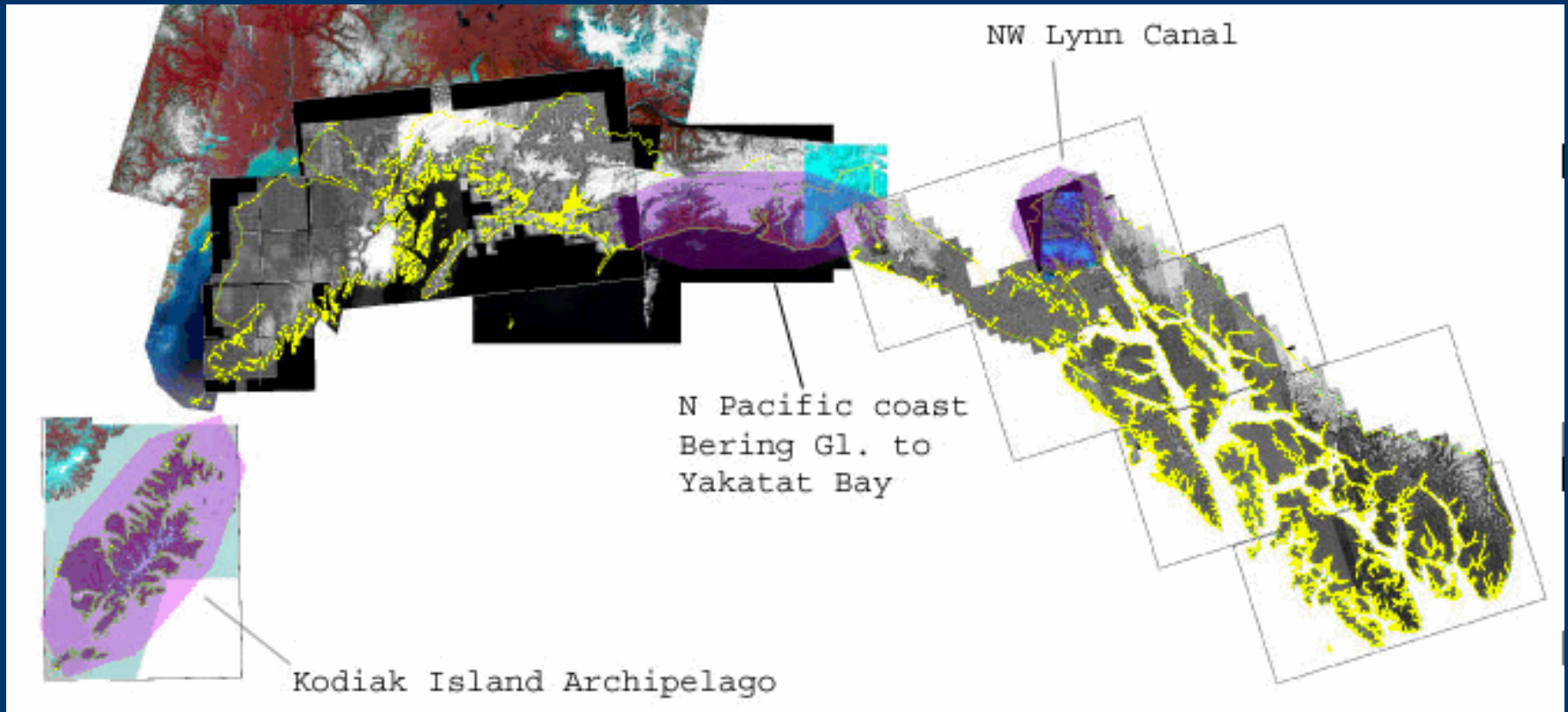
- No current collection; collection planned
- 5% cloud cover
- Possible 1m spaceborne digital acquisition of multispectral imagery with NIR band
- Or same as Tongass
- DEM source? USGS
- Cost?
- Orthorectified imagery delivered
- No licensing restrictions



USDA Forest Service Estimated Production Cost

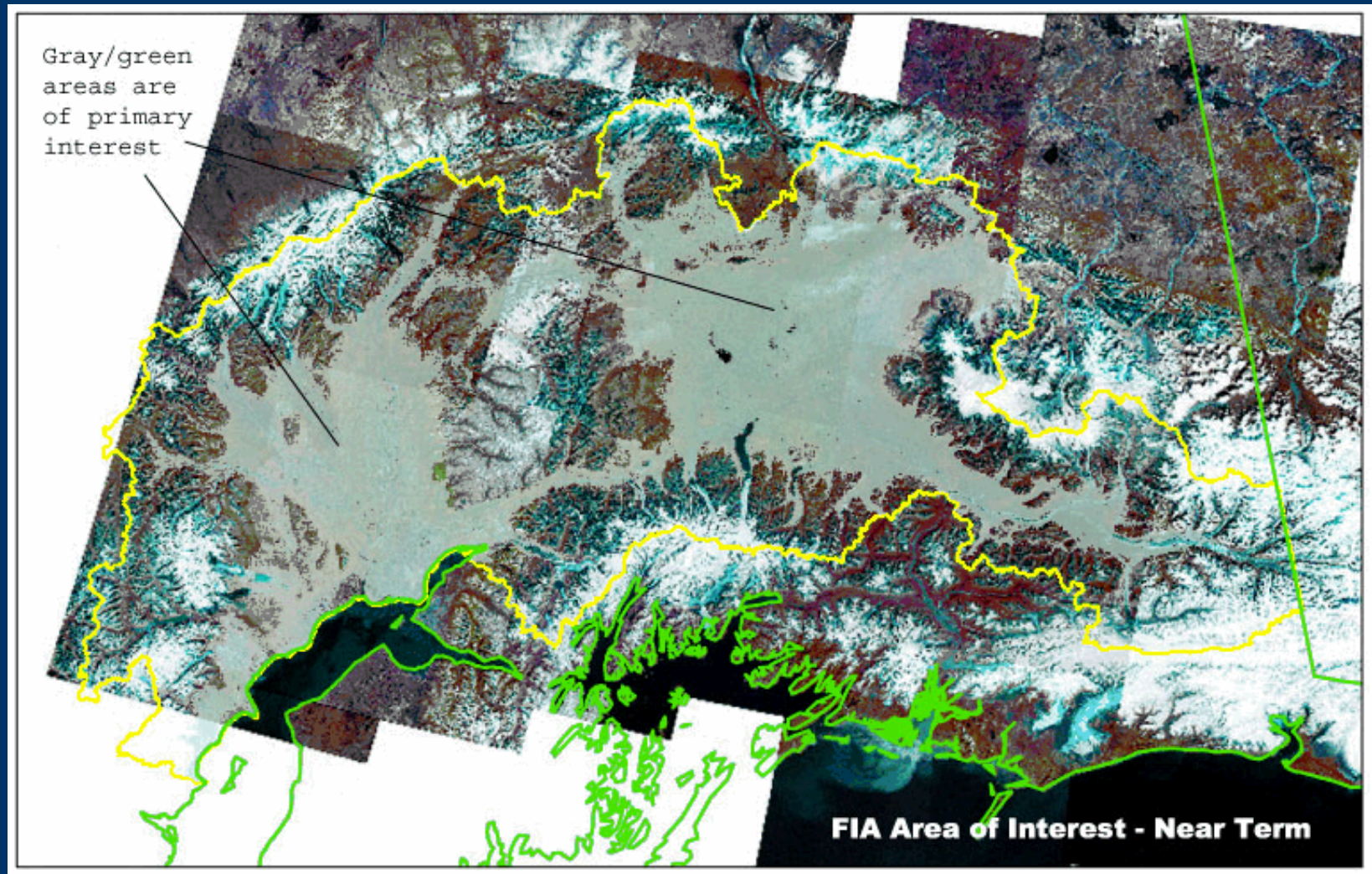
- Aerial Photograph \$2137 per 15 minute quadrangle. \$602 per 7.5 minute quadrangle. (includes scanning of films)
- DEM \$220-\$400 per 15 minute quadrangle. \$55-\$100 per 7.5 minute quad, estimate
- Ground control points collection average \$688 per 15 minute quad, \$172 per 7.5 minute quad
- Control generation?????. We spent \$50,000 in FY05 fieldwork but that is only a portion of the cost.
- AT per 7.5 minute quad = \$325
- DOQ 7.5 minute = \$740
- Total 7.5 quad = \$1939 15 minute quad = \$7756 plus control costs.

Current FIA Interest

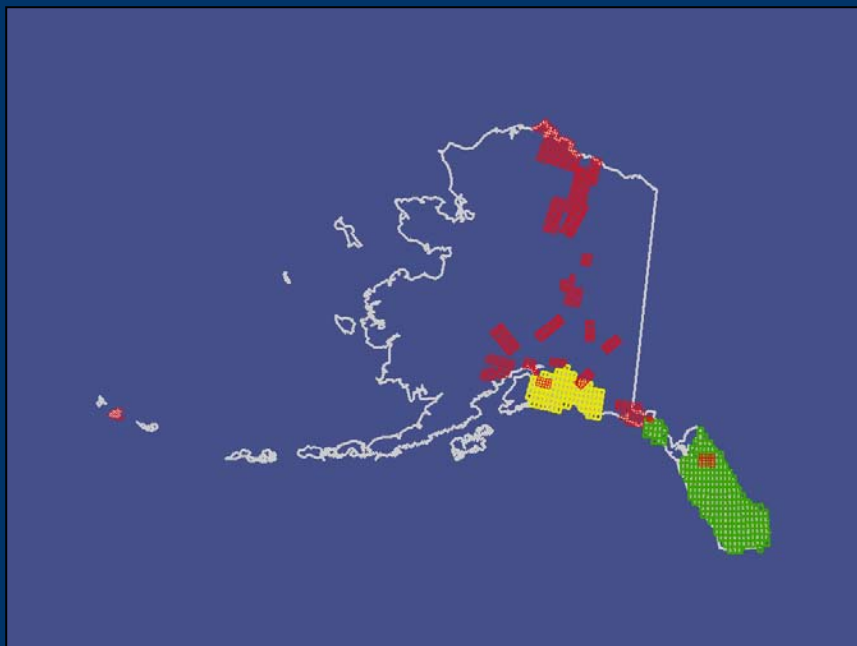


Kodiak Island Archipelago, from the east side of the Chugach NF to the west edge of the Tongass NF, and the northwest end of Lynn Canal in southeast AK.

FIA near term area of interest



Forested parts of the Susitna and Copper River Drainages.



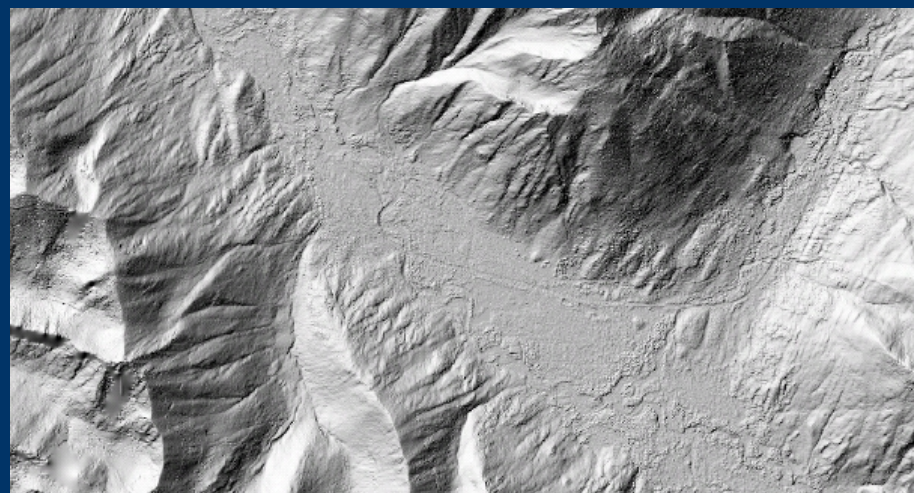
5 m archived DEM coverage

2m H / 1m V accuracy

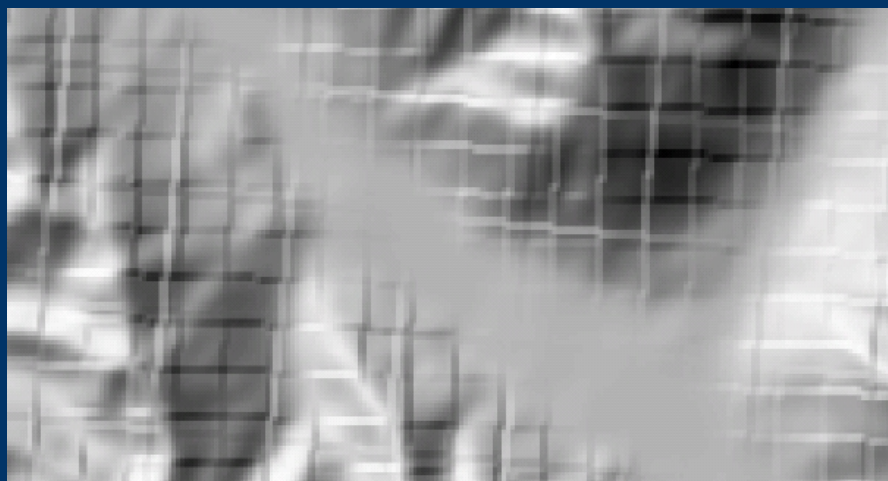
Airborne IFSAR x-band derived

New collection \$35 - \$50 sq km

- Can be used for orthorectification
- Bare surface derived



Archived DEM, 5m hillshade



Current DEM, 45m hillshade

